

Serial No. 10/673,027
60130-1894; 02MRA0144

AMENDMENT

IN THE CLAIMS:

1. (CURRENTLY AMENDED) A system that detects an obstruction in a path of an openable vehicle member, comprising:
a direct detector that directly detects the obstruction, the direct detector including a sensor; and
an indirect detector that indirectly detects the obstruction and outputs openable member position information to the direct detector, ~~wherein only the direct detector is provided with the openable member position information~~ the openable member position information is used to define operating parameters of the direct detector.
2. (PREVIOUSLY PRESENTED) The system of claim 1, wherein the indirect detector detects a force exerted by the obstruction on the openable vehicle member.
3. (CURRENTLY AMENDED) The system of claim 1, wherein the sensor is ~~the direct detector comprises~~ a light sensor that receives light in a vicinity of the obstruction, and the direct detector includes an analysis circuit that conducts an analysis of the light received by the light sensor.
4. (PREVIOUSLY PRESENTED) The system of claim 3, wherein the analysis circuit conducts the analysis by comparing a distribution of the light received by the light sensor to a reference distribution.
5. (ORIGINAL) The system of claim 3, wherein the light sensor is a charge coupled device sensor.
6. (PREVIOUSLY PRESENTED) The system of claim 1, wherein the direct detector detects the obstruction according to the openable member position information provided by the indirect detector.

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7. (CURRENTLY AMENDED) A method for detecting an obstruction in a path of an openable member, comprising the steps of:

indirectly detecting the obstruction by detecting a force exerted by the obstruction on the openable member using an indirect detector;

outputting openable member position information;

directly detecting the obstruction in the path of the openable member with a direct detector based on the openable member position information, wherein the direct detector includes a sensor; and

using the openable member position information to define operating parameters of the direct detector ~~providing the openable member position information to only the direct detector.~~

8. (ORIGINAL) The method of claim 7, wherein the step of directly detecting the obstruction comprises detecting a light distribution along a closing line of the openable member.

9. (CURRENTLY AMENDED) The method of claim 8, wherein the step of directly detecting the obstruction comprises:

comparing the light distribution along the closing line with a reference distribution; and

indicating a presence of the obstruction when the step of comparing step—the light distribution along the closing line with the reference distribution shows a variation between the light distribution and the reference distribution.

10. (CURRENTLY AMENDED) The method of claim 9, wherein the step of directly detecting the obstruction further comprises ~~the a~~ step of updating the reference distribution based on the openable member position information.

11. (ORIGINAL) The method of claim 9, wherein the reference distribution is based on the openable member position information.

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12. (CURRENTLY AMENDED) The method of claim 9, wherein the step of indicating step the presence of the obstruction indicates the presence of the obstruction when the step of comparing the light distribution along the closing line with the reference distribution step shows that the variation between the light distribution and the reference distribution is greater than a predetermined threshold.
13. (ORIGINAL) The method of claim 12, wherein the predetermined threshold is variable based on the openable member position information.
14. (CURRENTLY AMENDED) An anti-trapping system for an openable vehicle member, comprising:
a drive system that controls movement of the openable vehicle member;
an indirect detector that detects a force exerted by an obstruction on the openable vehicle member; and
a direct detector comprising:
a light sensor that detects a light distribution affected by the obstruction and receives openable member position information from the indirect detector, wherein ~~only the direct detector is provided with the openable member position information~~ the openable member position information is used to define operating parameters of the direct detector, and
an analysis circuit that conducts an analysis of light received by the light sensor and outputs an interruption signal to the drive system to stop movement of the openable vehicle member if the obstruction is detected.
15. (PREVIOUSLY PRESENTED) The system of claim 14, wherein the analysis circuit compares the light distribution received by the light sensor to a reference distribution.
16. (ORIGINAL) The system of claim 14, wherein the light sensor is a charge coupled device sensor.

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17. (ORIGINAL) The system of claim 14, wherein the direct detector detects the obstruction according to the openable member position information provided by the indirect detector.
18. (NEW) The system of claim 1, wherein operation of the direct detector is adapted according to the openable member position information outputted by the indirect detector.
19. (NEW) The system of claim 1, wherein the direct detector further includes a processor that processes the openable member position information from the indirect detector.
20. (NEW) The system of claim 1, wherein the direct detector further includes a processor that processes information which is detected by the sensor.
21. (NEW) The method of claim 7, further including a step of adapting operation of the direct detector according to the openable member position information outputted by the indirect detector.
22. (NEW) The method of claim 7, further including a step of processing information from the sensor with a processor of the direct detector.
23. (NEW) The method of claim 7, further including a step of processing the openable member position information from the indirect detector with a processor of the director detector.
24. (NEW) The system of claim 14, wherein operation of the direct detector is adapted according to the openable member position information outputted by the indirect detector.
25. (NEW) The system of claim 14, wherein the direct detector further includes a processor that processes the openable member position information from the indirect detector.
26. (NEW) The system of claim 14, wherein the direct detector further includes a processor that processes information which is detected by the light sensor.